

Bi-Weekly IOOS® Z-GRAM – 24 August 2012

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The Z-Gram is an informal way of keeping you up-to-date on US IOOS® activities. Please advise of additional addressees, or if you are receiving and no longer want to receive. If you think others could benefit from the Z-Gram please pass it on. To see previous Z-Grams go the IOOS website and view under [program updates](#).

IOOS® - A Partnership supporting Lives and Livelihoods

Highlights:

Inaugural Federal Advisory Committee meeting: Setting up a Federal Advisory committee from scratch takes a lot of hard work. We began setting up the committee in August 2010 so we are really excited about holding the first meeting. Jessica Snowden (IOOS Program Office) led the effort with great assistance from Vicki Kromer and Kate Lambert of the US IOOS Program Office; Josh Young and Nick Rome of IOOC staff; IOOC members; and especially from DFOs and staffs of other NOAA FAC i.e. Science Advisory Board, Hydrographic Services Review Panel, and the Marine Protected Area advisory panel. My sincere thanks for the hard work and **persistence** that went into us reaching this major milestone.

Governance and Management Subsystem:

- **GPRA Development:** The group working to develop FY13 regional milestones (Scott, Jen, Kate, Gabrielle, and Dave from IOOS, and Danielle Williams from SCCOOS) met to better define what the objectives. There is consensus that creating office level milestones for each of the regions is desired. In addition, development of a national or super-regional milestone will continue to be pursued, potentially as a “pilot” milestone that could be used in FY14 as an NOS level milestone.
- **Funding Opportunities:**
 - **Hurricane Testbed:** On Aug 10, 2012, NOAA’s Office of Oceanic and Atmospheric Research (OAR) published a Federal Funding Opportunity (FFO) soliciting LOIs (Letters of Intent) under the U.S. Weather Research Program (USWRP), as administered by the USWRP Joint Hurricane Testbed (JHT). OAR is looking for researchers to submit proposals to test and evaluate, and modify if necessary, in a quasi-operational environment, their own scientific and technological research

applications. Projects satisfying metrics for success and operational constraints may be selected for operational implementation by the operational center(s) after the completion of the JHT-funded work. The period of the award is from one to two years. Closing date: Dec 07, 2012. For the full announcement, please visit: <http://grants.gov>. The announcement number is NOAA-OAR-OWAQ-2013-2003469. If you have difficulty accessing the full announcement electronically, please contact: Dr. Jiann-Gwo Jiing, Director, Joint Hurricane Testbed, Tropical Prediction Center, 11691 SW. 17th St., Miami, FL 33165. Office Tel.: [305-229-4443](tel:305-229-4443). E-mail: jiann-gwo.jiing@noaa.gov.

- **NSF Ocean Acidification Program Solicitation:** Deadline is December 4, 2012; <http://www.nsf.gov/pubs/2012/nsf12600/nsf12600.pdf>

Observation Subsystem:

- **High Frequency Radar/Radio:** For more information contact the US IOOS HFR Project Manager, Jack Harlan, Jack.Harlan@noaa.gov:
 - Results of the HF Radar Steering team include 2 white papers on the use of HF Radar in the Great Lakes and HF Radar for measuring waves. To read the reports go to: <http://www.ioos.gov/hfradar/welcome.html>

Data Management and Communications (DMAC) Subsystem: To get on the IOOS System Status list which announces service changes, please contact Derrick (Derrick.Snowden@noaa.gov) or Rob (Rob.Ragsdale@noaa.gov).

- **National DMAC:**
 - **Vocabulary Development and Management:** Sara Haines (SECOORA) has completed mappings of the IOOS Parameter Vocabulary hosted on the MMI Ontology Registry and Repository Website which allows the user to understand the differences and similarities between terms in multiple vocabularies.
 - **IOOS RA Annual DMAC Workshop:** September 11-13, IOOS Program Office conference room. Reps from 11 IOOS RAs, US Army Corps of Engineers and NOAA offices (NODC, CO-OPS, Chesapeake Bay Office, NGDC) will be attending. For more details contact: Rob.Ragsdale@noaa.gov
- **Getting the Word Out:** The OGC North America Forum invites you to exhibit at the **September 19 OGC North American Open Standards Technology Exposition in Reston, Virginia**. The Exposition, free to exhibitors and attendees, provides a unique opportunity to showcase commercial and government-built products that implement OGC standards. Exhibitors are invited to demonstrate how their products provide value to US governmental agencies in terms of cost reductions, implementation schedule reductions, and interoperability performance improvements for current and future capabilities. This Open Standards Technology Exposition has been organized by the OGC North America Forum and will be hosted by Oracle at their offices at 1900 Oracle Way in Reston, VA on the 19th of September, 2012 from 9:00 am - 3:00 pm. If your organization is interested in exhibiting, please fill out and submit the Exhibitor

Reservation Application, which you can download from <https://portal.opengeospatial.org/files/49745>. Only 20 tables are available, and applications will be accepted on a first-come, first-serve basis. Submission of the application does not guarantee a booth. Those wishing to attend this free event should register at https://portal.opengeospatial.org/public_ogc/register/120919_naf.php. For more information please send an email to naf.expo@opengeospatial.org.

Modeling and Analysis Subsystem: For information on the US IOOS Coastal Ocean Modeling Testbed, please contact the US IOOS Modeling Testbed Project Manager, Becky Baltes, Becky.Baltes@noaa.gov

- **U.S. IOOS Testbed:**
 - **Inundation:** The team has investigated a gust factor to adjust wind forcing, to reconcile predicted and observed wave conditions in the Gulf of Maine. Additionally, they discovered that FVCOM had a little known default lower limit on the effective bottom friction coefficient that was causing it to under predict the storm surges for hurricanes Ike and Rita in the Gulf of Mexico as compared to ADCIRC, SELFE and the observational data.
 - **Estuarine Hypoxia:** The team has developed a new visualization tool called Mat2Tecplot, which is coded in Matlab to convert model results into tecplot format. The tool will improve visualizing and analyzing model results with advanced capabilities of the Tecplot software. Also, recent results from the VIMS's group showed that the MPDATA (Multidimensional Positive Definite Advection Transport Algorithm) scheme with an updated version of the ROMS model gives much better vertical stratification of salinity fields in the CB model of year 2004.
 - **Shelf Hypoxia:** The team has implemented the ROMS hypoxia submodel within FVCOM. They have ongoing work with hindcasts with FVCOM. The model simulation is being analyzed and different treatments of nutrients and detritus at the river boundary are being tested. There are some limitations of the FVCOM modeling system that need to be addressed in order to improve model skill, but they are being addressed with the help of the FVCOM development team.
 - **Cyberinfrastructure:** The team is making progress on three primary issues: (1) Model and Observation externalization – allowing users to access data in the form of grids (DAP), time series (DAP and SOS), and images (WMS), (2) Metadata and Catalog – implementation of metadata standards connected to a catalog to allow for search and access, (3) Matlab tools to allow users to access the data.

Interagency Collaboration:

- **DMAC Steering Team: Will meet Sept 5-6,** Consortium of Ocean Leadership, Washington, DC. The core of the meeting will be breakout discussions on metadata priorities building off the ST's IOOS Summit white paper. The goal is to define one or

more concrete and practical use cases for advancing community practices for metadata associated with the overall data life cycle.

- **IOOS and Links to the National Water Quality Monitoring Network: No Update.**
- **IOOS and The National Science Foundation (NSF) - Ocean Observatories Initiative (OOI): No update.**

Other:

- **Thank you to PacIOOS for their Hospitality:** Jen Rhoades, IOOS PO, visited PacIOOS, partners, and stakeholders on Oahu during the week of Aug. 20. During her visit, Jen had informative meetings with PacIOOS Data Management, Outreach and Education, and Modeling staff. She engaged with local staff from NMFS' Coral Reef Ecosystem Division, NOS' Coastal Storms Program and Pacific Services Center, NWS' Pacific Region Headquarters and the Honolulu Weather Forecast Office, and USACE's Honolulu District. Jen also met with the animal telemetry PI at Coconut Island, which included an informative and educational review of the program including feeding sharks – the feed included a research device that tracks shark feeding habits.
- **Thailand Delegation visits MARACOOS:** Zdenka traveled to MARACOOS partner, Rutgers University, to meet with a high-ranking delegation from Thailand's Ministry of Science & Technology and the GISTDA (Geo-Informatics Space Technology Development Agency). The senior members of the delegation included, Ms. Saowanee Musidang, Deputy Permanent Secretary, Ministry of Science and Technology and Dr. Surachai Ratanasermpong, Deputy Executive Director of GISTDA. The delegation were in the US to understand HF radar technology utilization and to inspect HF Radars they have purchased from CODAR Ocean Sensors; they visited the HF Radar SeaSonde site in Seabright, New Jersey and the Rutgers University COOLRoom. Zdenka and Scott Glenn provided presentations. For additional information and presentations visit www.ioos.gov.
- **PacIOOS Releases Technical Report on High Water Level Forecasting:** PacIOOS serves 7-day forecasts of high coastal water levels for nine locations in the Pacific Islands region. Designed to complement the detailed forecast information available online--PacIOOS has generated this report to provide more on the methodology behind the forecast model analysis and development. http://library.constantcontact.com/download/get/file/1105866148764-69/TechRep_PacIOOS_SL_Forecast_07-17-2012.pdf
- **ACT briefs the IWG-OP:** During the August 14 meeting of the Interagency Working Group on Ocean Partnerships (IWG-OP), Mario Tamburri gave a presentation on the Alliance for Coastal Technologies (ACT) and the Marine Environmental Resource Center (MERC) activities. Mario highlighted strong existing interagency partnerships as part of this discussion, and invited interest in new partnerships. Rodney Cluck, IWG-OP co-chair and a BOEM representative indicated that BOEM may have some interest in working with ACT to validate instruments for compliance monitoring.
- **Discovery features prominent scientists' work on tagging great white:** Dr. Barbara Block and her TOPP team were featured on Discovery. Hopefully you were able to catch

the entire show. A short video (1:57 min) summarizing this amazing work is posted on DSC site: <http://dsc.discovery.com/tv-shows/shark-week/videos/great-whites-of-the-serengeti.htm>

- **142nd Annual Meeting of the American Fisheries Society:** Hassan attended parts via phone. Two oral presentations submitted by Hassan were accepted. The first was a presentation on the “US Integrated Ocean Observing System: Improving Fisheries Observing Data Dissemination” and the second was titled: “Functional Feeding Response of Piscivorous Fishes and Implications in Multispecies and Ecosystem Models”. Hassan’s is grateful to his colleagues Phillip Goldstein (University of Colorado) and Robert Gamble (NOAA Fisheries) for presenting on his behalf.
- **Sentinel Sites:** “A Workshop to Integrate Scientific Communities into a Coastal Sentinel Site Network of Networks”: Hassan and Rob, US IOOS Program Office, along with Josie Quintrell, NFRA, participated in this workshop. The workshop was held to explore development of a coastal sentinel site network or networks from leveraging existing data streams/monitoring programs from networks of science agencies and organizations. A varied number of federal, state and regional organizations including NOAA, IOOS, NERRS, NSF, NPS, and NAML that represent examples of these networks participated. In the workshop, opportunities and outcomes from a network were pinpointed, data priorities and management applications were identified and mechanisms for scaling up to meet the regional or national need were discussed. A blueprint for scaling up several existing data streams to meet the regional and/or national information needs of resource management agencies will be drafted from the information that was collected.
- **Sentinel Site - Chesapeake Bay:** Hassan, US IOOS Program office, attended the webinar conducted by the NOAA Chesapeake Bay Office. Chesapeake Bay is 1 of 5 pilot areas (the other locations are the Northern Gulf of Mexico, North Carolina Coast, San Francisco Bay and Hawaii). All sites are focusing on sea level change. The Chesapeake Bay Cooperative is in the process of forming a working group to plan and execute a regional Sentinel Site strategy and has reached out to MARACOOS to be part of this working group.

Congressional: No update

Communications/Outreach:

- HAB Camera: New survey of ocean floor finds juvenile scallops are abundant in the Mid-Atlantic, Phys.Org <http://phys.org/news/2012-08-survey-ocean-floor-juvenile-scallops.html>. Science Daily, <http://www.sciencedaily.com/releases/2012/08/120823161924.htm>. IOOS provided partial funding to WHOI, Scott Gallagher for this capability that has now been transitioned to operations.

- The U.S. Integrated Ocean Observing System IOOS® Federal Advisory Committee was created to evaluate scientific and technical information related to design. www.noaanews.noaa.gov/stories2012/20120820_ioos.html
 - This Press Release was published in a number of publications including, World Maritime News, Subsea World News, Ocean and Technology News, Oregon State University, GISuser
- Manley Appointed to **IOOS** System Advisory Committee Naval Technology: Teledyne Webb Research (TWR) is a world leader in the design and manufacture of scientific instruments for oceanographic research and monitoring. www.naval-technology.com/.../pressmanley-appointed-to-ioos...
- **Updates to the ioos.gov website**
 - [HOME](#) – Meeting with Thai delegation at Mid-Atlantic partner Rutgers Univ; News and Highlights section: link to Advisory Committee and FRN posted
 - [News Splash](#) – Profiling Glider to collect data along Gulf Coast (Shell Oil/IOOS/NDBC); Federal Advisory Committee to hold first meeting
 - [Feature Story](#) – “Thai Delegation Introduced to U.S. IOOS Technologies at Mid-Atlantic Partner, Rutgers University”
 - [IOOS Advisory Committee](#) – Final agenda and supporting materials added
 - [HFR](#) – Steering team’s position papers added: “Use of HFR for Wave Measurement”, “Use of HFR in Freshwater”
 - [National Glider Strategy](#) - White paper (Summit 2012) about the National Glider Network for sustained obs and one pagers added
 - [Regional](#) and web pages of every region: Factsheets 2012 added
 - [Communication](#) – Zdenka’s presentation to the Thai delegation and Federal Advisory Committee press release added
 - [Funding](#) – updated, Guidance on Performance Progress Reports (Aug. ’12) added
 - [Program Updates](#) – Z-Gram available as a web page and as PDF

IOOS Conference Involvement: This section will highlight those conferences where US IOOS is a sponsor/or has a major footprint.

Upcoming Meetings : To see the IOOS calendar, visit: <http://www.usnfra.org/calendar.html> or <http://www.ioos.gov/about/calendar.html>

Cheers,

Zdenka